Deployment Fact Sheet

Dual-Arm Work Platform

(Technology Management System # 1787)

The Dual-Arm Work Platform (DAWP), developed by the Environmental Management Robotics Technology Development Program at Oak Ridge, consists of two 6-degrees-of-freedom (DOF) Schilling hydraulic manipulator arms mounted on a 5-DOF hydraulic positioning base. The DAWP is designed for use in teleoperation, telerobotic, and robotic modes. The DAWP has been demonstrated for a variety of D&D tasks at the Chicago Pile 5 LSDP, including reactor control rod cutting and sizing, reactor vessel dismantlement, and removal of contaminated lead panels and graphite bricks. Equipped with a circular saw, the DAWP cut up large sections of the reactor and then passed them out to Rosie-C for size-reduction and waste packaging.

Baseline Technology: Manual dismantlement techniques using standard handheld tools

Implementation: The DAWP is currently being implemented at CP-5 for continued dismantlement of the CP-5 reactor vessel. *Contact: Les Seifert (ANL) 630-252-5100*

Deployment: None to date

DAWP Benefits

Can be mounted on deployment devices such as Rosie-C, overhead cranes, telescoping booms, and remote vehicles

Remote operation removes workers from high-radiation environments, supporting ALARA principles

Accepts a variety of tooling configurations including oxygasoline cutting torch, router, reciprocating saw, and electrical impact hammer

Operator control and remote viewing capabilities have been integrated with the Rosie-C audio/video capabilities

Other high-potential deployment opportunities at DOE sites:		
Operations Office/Site	**Project Name**	**2006 Plan Project Number**
Chicago Operations	ANL-E D&D actions	CH-ANLEDD
Idaho Operations	D&D	ID-ER-10
Oak Ridge/ORNL	White Oak Creek D&D	OR-43202
Oak Ridge/ORNL	Bethel Valley D&D	OR-43204
Savannah River Operations	HWCTR projects	SR-ER09

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